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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,757	11/30/1999	HIROTAKA ISHII	040281-0118	8146

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EXAMINER

KIBLER, VIRGINIA M

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/450,757

Applicant(s)

ISHII ET AL.

Examiner

Virginia M Kibler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Swonger et al. (4,210,899).

Regarding claim 1, Swonger et al. ("Swonger") discloses a fingerprint identification device to identify fingerprints (Col. 1, lines 33-34). The apparatus of "device" comprises a fingerprint reader unit 12a to input a fingerprint to be detected (Figure 1), a database unit to record a fingerprint database 26 provided in advance (Figure 1), a fingerprint comparing 24 unit that identifies the input fingerprint from the fingerprint reader unit by comparing with fingerprints stored in the fingerprint database recorded in the database unit (Col. 2, lines 5-9), and a user recording unit that records the fingerprint inputted by the fingerprint reader unit (Col. 4, lines 43-48).

Regarding claim 4, Swonger discloses an image processing unit 24 to process the input fingerprint (Figure 1).

Regarding claim 5, Swonger discloses the user recording unit recording the input fingerprint transmitted from the image processing unit (Col. 4, lines 45-48). The transmitted input fingerprint includes processed data of the input fingerprint (Col. 4, lines 7-11).

Regarding claim 6, Swonger discloses a feature extraction unit 24 to extract a feature count from the input fingerprint (Figure 1).

Regarding claim 8, Swonger discloses a date counter that provides a date record (Col. 2, lines 9-10) used to generate a recording history (Col. 2, line 27).

Regarding claim 9, Swonger discloses a fingerprint identification device that is used for access control (Col. 1, line 53).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swonger et al. (4,210,899) in view of Sparrow (4,817,183).

Regarding claim 2, Swonger discloses a fingerprint identification device that allows for adaptively improving the database for each identity whenever an identity is verified (Col. 12, lines 34-36). Swonger does not disclose the recording unit recording the input fingerprint only when the fingerprint comparing unit does not identify the input fingerprint. However, Sparrow teaches that it is known to record only once (Col. 1, line 68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the

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recording unit disclosed by Swonger to only record unidentified fingerprints, as taught by Sparrow, for efficiency.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swonger et al. (4,210,899) in view of Moulton (4,186,378).

Regarding claim 3, Swonger discloses the user recording unit recording the input fingerprint transmitted from the image processing unit (Col. 4, lines 45-48). Swonger does not disclose including raw data of the input fingerprint. However, Moulton teaches that it is known to store raw data (Col. 1, line 56). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the recording unit disclosed by Swonger to store raw data of the input fingerprint, as taught by Moulton, in order to for the image to be fully restored.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swonger et al. (4,210,899) in view of Jain et al. (6,185,318).

Regarding claim 6, the arguments analogous to those presented above for claim 6 are applicable to claim 7. Swonger does not expressly state that extracted feature count results in a compact data size. However, Jain et al. ("Jain") teaches that it is known to compress attribute or "feature" data (Col. 15, lines 14-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the feature extraction unit as disclosed by Swonger to include compact data size, as taught by Jain, in order to increase storage capacity.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,175,640 to Wada for fingerprint comparing apparatus.

Contact Information

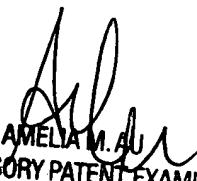
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072.

The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

VK
October 1, 2002


AMELIA M. AU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600